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Pengembangan Antarmuka Sistem Media Monitoring Berbasis Web dan Evaluasi Usabilitas Komparatif Terhadap Sistem xPlore
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DAFTAR PUSTAKA

[1] M. Alda, "Pengembangan aplikasi pengolahan data siswa berbasis android menggunakan metode prototyping," *Jurnal Manajemen Informatika (JAMIKA)*, vol. 13, pp. 11–23, 1 2023. [Online]. Available: https://doi.org/10.34010/jamika.v13i1.8216

[2] Kementerian Komunikasi dan Digital Republik Indonesia, "Pedoman monitoring media," 2024, diakses pada: 30 September 2026. [Online]. Available: https://djkpm.komdigi.go.id/assets/files/pedoman-monitoring-media.pdf

[3] I. Adriani, T. Patriani, and O. Purnamasari, "Strategi media monitoring pt. kinanti strategi utama dalam handling krisis pemberitaan media," *INTERCODE*, vol. 3, no. 1, pp. 18–29, 2023. [Online]. Available: https://doi.org/10.36269/ire.v3i1.2104

[4] T. Kholida and E. Dulwahab, "Kegiatan media monitoring pada media online biro administrasi pimpinan," *Reputation Jurnal Hubungan Masyarakat*, vol. 9, no. 1, pp. 81–98, 2024. [Online]. Available: https://digilib.uinsgd.ac.id/id/eprint/95187

[5] G. Neri, S. Marshall, H. K.-H. Chan, A. Yaghi, D. Tabor, R. Sinha, and S. Mazumdar, "Data visualization in ai-assisted decision-making: a systematic review," *Frontiers in Communication*, vol. 10, p. 1605655, 2025. [Online]. Available: https://doi.org/10.3389/fcomm.2025.1605655

[6] G. A. Miller, "The magical number seven, plus or minus two: Some limits on our capacity for processing information." *Psychological review*, vol. 63, no. 2, p. 81, 1956. [Online]. Available: https://doi.org/10.1037/h0043158

[7] N. Cowan, "The magical number 4 in short-term memory: a reconsideration of mental storage capacity." *Behavioral & Brain Sciences*, vol. 24, no. 1, p. 87, 2001. [Online]. Available: https://doi.org/10.1017/S0140525X01003922

[8] SiJogja, "Diluncurkan, ini manfaat perangkat analisa xplore.pustakadata.id," https://www.sijogja.com/news/pr-1846261748/diluncurkan-ini-manfaat-perangkat-analisa-xplorepustakadataid, 2022, diakses pada: 13 September 2026.

[9] "Dashboards | grafana documentation." [Online]. Available: https://grafana.com/docs/grafana/latest/visualizations/dashboards/

[10] "Share dashboards and panels | grafana documentation." [Online]. Available: https://grafana.com/docs/grafana/latest/visualizations/dashboards/share-dashboards-panels/

[11] L. Zou, Z. Zhang, M. Mavilidi, Y. Chen, F. Herold, K. Ouwehand, and F. Paas, "The synergy of embodied cognition and cognitive load theory for optimized learning," *Nature Human Behaviour*, vol. 9, pp. 877–885, 2025. [Online]. Available: https://doi.org/10.1038/s41562-025-02152-2

[12] S. Srivastava, H. Shukla, N. Landge, A. Srivastava, and D. Jindal, "A comprehensive review of next. js technology: Advancements, features, and

UNIVERSITAS
GADJAH MADA
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applications," in *Proceedings of the International Conference on Innovative Computing & Communication (ICICC 2024)*, 2024. [Online]. Available: https://ssrn.com/abstract=4831070

[13] T. Leppänen, "Data visualization and monitoring with grafana and prometheus," Bachelor's Thesis, Information and Communications Technology, Turku University of Applied Sciences, 2021. [Online]. Available: https://urn.fi/URN:NBN:fi:amk-2021122090248

[14] J. Kapočiūtė-Dzikienė and A. Ungulaitis, "Towards media monitoring: detecting known and emerging topics through multilingual and crosslingual text classification," *Applied Sciences*, vol. 14, no. 10, p. 4320, 2024. [Online]. Available: https://doi.org/10.3390/app14104320

[15] R. Sultana, "Artificial intelligence in data visualization: Reviewing dashboard design and interactive analytics for enterprise decision-making," *International Journal of Business and Economics Insights*, vol. 5, no. 3, pp. 01–29, 2025. [Online]. Available: https://doi.org/10.63125/cp51y494

[16] A. AlAbdulaali, A. Asif, S. Khatoon, and M. Alshamari, "Designing multimodal interactive dashboard of disaster management systems," *Sensors*, vol. 22, no. 11, p. 4292, 2022. [Online]. Available: https://doi.org/10.3390/s22114292

[17] A. Timileyin, "The role of cognitive load in shaping web usability requirements," *Available at SSRN 5247018*, 2024.

[18] K.-H. Huang, P. Laban, A. R. Fabbri, P. K. Choubey, S. Joty, C. Xiong, and C.-S. Wu, "Embrace divergence for richer insights: A multi-document summarization benchmark and a case study on summarizing diverse information from news articles," in *Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (Volume 1: Long Papers)*, 2024, pp. 570–593. [Online]. Available: https://doi.org/10.18653/v1/2024.naacl-long.32

[19] I. Drosos, A. Sarkar, X. Xu, C. Negreanu, S. Rintel, and L. Tankelevitch, "" it's like a rubber duck that talks back": Understanding generative ai-assisted data analysis workflows through a participatory prompting study," in *Proceedings of the 3rd Annual Meeting of the Symposium on Human-Computer Interaction for Work*, 2024, pp. 1–21. [Online]. Available: https://doi.org/10.1145/3663384.3663389

[20] F. Panadjo, B. G. Mesak, A. Waroh, T. T. Pairunan, and A. A. Kimbal, "Rancang bangun aplikasi pengelolaan data alumni untuk mendukung administrasi akademik di politeknik negeri manado," *Pendas: Jurnal Ilmiah Pendidikan Dasar*, vol. 11, no. 02, pp. 150–161, 2026. [Online]. Available: https://doi.org/10.23969/jp.v11i02.53034

[21] D. Fu, B. S. Tlebaev, T. Zhang, J. Deng, and Z. Shi, "User interface design strategies for enhancing website use convenience: An a/b experimental evaluation based on usability metrics in e-commerce websites," *INTERNATIONAL JOURNAL OF ADVANCES IN SIGNAL AND IMAGE SCIENCES*, vol. 12, pp. 312–322, 2026. [Online]. Available: https://doi.org/10.29284/3b509779

UNIVERSITAS
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[22] P. Vlachogianni and N. Tselios, "Perceived usability evaluation of educational technology using the system usability scale (sus): A systematic review," *Journal of Research on Technology in Education*, vol. 54, no. 3, pp. 392–409, 2022. [Online]. Available: https://doi.org/10.1080/15391523.2020.1867938

[23] "Solutions overview | elastic docs." [Online]. Available: https://www.elastic.co/docs/get-started/introduction

[24] J. Ofoeda, R. Boateng, and J. Effah, "Application programming interface (api) research: A review of the past to inform the future," *International Journal of Enterprise Information Systems (IJEIS)*, vol. 15, no. 3, pp. 76–95, 2019. [Online]. Available: https://doi.org/10.4018/IJEIS.2019070105

[25] A. Ehsan, M. A. M. Abuhaliqa, C. Catal, and D. Mishra, "Restful api testing methodologies: Rationale, challenges, and solution directions," *Applied Sciences*, vol. 12, no. 9, p. 4369, 2022. [Online]. Available: https://doi.org/10.3390/app12094369

[26] S. Jha, M. Christodorescu, and A. Pham, "Formal analysis of the api proxy problem," *arXiv preprint arXiv:2302.13525*, 2023. [Online]. Available: https://doi.org/10.48550/arXiv.2302.13525

[27] J. A. Silverman, S. A. Ali, A. Rybak, J. B. van Goudoever, and N. S. Leleiko, "Generative ai: potential and pitfalls in academic publishing," *JPGN reports*, vol. 4, no. 4, p. e387, 2023.

[28] K. Kenthapadi, H. Lakkaraju, and N. Rajani, "Generative ai meets responsible ai: Practical challenges and opportunities," in *Proceedings of the 29th ACM SIGKDD conference on knowledge discovery and data mining*. Association for Computing Machinery, 2023, pp. 5805–5806. [Online]. Available: https://doi.org/10.1145/3580305.3599557

[29] P. Sahoo, A. K. Singh, S. Saha, V. Jain, S. Mondal, and A. Chadha, "A systematic survey of prompt engineering in large language models: Techniques and applications," *arXiv preprint arXiv:2402.07927*, 2024. [Online]. Available: https://doi.org/10.48550/arXiv.2402.07927

[30] Google AI for Developers. (2026) Text generation with the gemini api. [Online]. Available: https://ai.google.dev/gemini-api/docs/text-generation

[31] Recharts Contributors, "Recharts: A composable charting library built on react components," https://recharts.org/, 2026, diakses pada: 11 September 2026.

[32] I. Gerchev, *Tailwind CSS*. SitePoint Pty Ltd, 2022.

[33] A. Maspupah, "Literature review: Advantages and disadvantages of black box and white box testing methods," *Jurnal Techno Nusa Mandiri*, vol. 21, no. 2, pp. 151–162, 2024. [Online]. Available: https://doi.org/10.33480/techno.v21i2.5776

[34] C. Avram and M. Mărușteri, "Normality assessment, few paradigms and use cases," *Revista Romana de Medicina de Laborator*, vol. 30, no. 3, pp. 251–260, 2022. [Online]. Available: https://doi.org/10.2478/rrlm-2022-0030

UNIVERSITAS
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[35] S. S. Shapiro and M. B. Wilk, "An analysis of variance test for normality (complete samples)," *Biometrika*, vol. 52, no. 3-4, pp. 591–611, 1965. [Online]. Available: https://doi.org/10.1093/biomet/52.3-4.591

[36] D. Chicco, A. Sichenze, and G. Jurman, "A simple guide to the use of student's t-test, mann-whitney u test, chi-squared test, and kruskal-wallis test in biostatistics," *BioData mining*, vol. 18, no. 1, p. 56, 2025. [Online]. Available: https://pmc.ncbi.nlm.nih.gov/articles/PMC12366075/

[37] X. Manfei, D. Fralick, J. Z. Zheng, B. Wang, M. T. Xin, and F. Changyong, "The differences and similarities between two-sample t-test and paired t-test," *Shanghai archives of psychiatry*, vol. 29, no. 3, p. 184, 2017. [Online]. Available: https://doi.org/10.11919/j.issn.1002-0829.217070

[38] University of Southern Queensland. (2022) Paired t-test assumptions, interpretation, and write up. [Online]. Available: https://usq.pressbooks.pub/statisticsforresearchstudents/chapter/paired-t-test-assumptions/

[39] D. G. Altman and J. M. Bland, "Parametric v non-parametric methods for data analysis," *British Medical Journal*, vol. 338, 2009. [Online]. Available: https://doi.org/10.2478/rrlm-2022-0030

[40] JASP Team. (2025) Paired t-test and wilcoxon signed ranks. [Online]. Available: https://sheffield.pressbooks.pub/help4jasp/chapter/paired-t-test-and-wilcoxon-signed-ranks/

[41] T. Harris and J. W. Hardin, "Exact wilcoxon signed-rank and wilcoxon mann–whitney ranksum tests," *The Stata Journal*, vol. 13, no. 2, pp. 337–343, 2013. [Online]. Available: https://doi.org/10.1177/1536867X1301300208

[42] T. Pricillia, "Perbandingan metode pengembangan perangkat lunak (waterfall, prototype, rad)," *Jurnal Bangkit Indonesia*, vol. 10, no. 1, pp. 6–12, 2021. [Online]. Available: https://doi.org/10.52771/bangkitindonesia.v10i1.153

[43] A. B. Paksi, N. Hafidhoh, and S. K. Bimonugroho, "Perbandingan model pengembangan perangkat lunak untuk proyek tugas akhir program vokasi," *Jurnal Masyarakat Informatika*, vol. 14, no. 1, pp. 70–79, 2023. [Online]. Available: https://doi.org/10.14710/jmasif.14.1.52752

[44] Y. I. Abdurrahman, "Analisis kinerja framework frontend next. js, vue. js, dan angular. js dalam sistem deteksi dan visualisasi objek pada pertandingan bola basket," Tugas Akhir, Program Studi D4 Teknologi Perangkat Lunak,Universitas Gadjah Mada, 2025.

[45] I. O. for Standardization, *Ergonomics of Human System Interaction: Usability, Definitions and Concepts*. ISO, 2018.

[46] W. Wetzlinger, A. Auinger, and M. Dörflinger, "Comparing effectiveness, efficiency, ease of use, usability and user experience when using tablets and laptops," in *International Conference of Design, User Experience, and Usability*. Springer, 2014, pp. 402–412. [Online]. Available: https://doi.org/10.1007/978-3-319-07668-3_39

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Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

[47] Q. Liu and K. Kim, "Research on the usability test of interface design in e-government-focused on qingdao e-government website," *Archives of Design Research*, vol. 36, no. 1, pp. 59–73, 2023. [Online]. Available: https://doi.org/10.15187/adr.2023.02.36.1.59

[48] P. Vlachogianni and N. Tselios, "Perceived usability evaluation of educational technology using the system usability scale (sus): A systematic review," *Journal of Research on Technology in Education*, vol. 54, no. 3, pp. 392–409, 2022. [Online]. Available: https://doi.org/10.1080/15391523.2020.1867938

[49] S. Aripiyanto, F. E. M. Agustin, F. P. Saputrie, Y. Durrachman, D. Khairani, and H. T. Sukmana, "Evaluation of user experience in the lecture activity menu of ais mobile for student using heuristic evaluation, system usability scale and user experience questionnaire," in *2024 12th International Conference on Cyber and IT Service Management (CITSM)*. IEEE, 2024, pp. 1–7. [Online]. Available: https://doi.org/10.1109/CITSM64103.2024.10775924

[50] M. H. Abdulfattah, A. D. Hanggoro, N. A. Tirtaningtyas *et al.*, "A whatsapp-based administrative chatbot for academic and service processes at astra polytechnic," in *2026 6th International Conference on Innovative Research in Applied Science, Engineering and Technology (IRASET)*. IEEE, 2026, pp. 1–6. [Online]. Available: https://doi.org/10.1109/IRASET68627.2026.11538685

[51] M. E. Khan and F. Khan, "A comparative study of white box, black box and grey box testing techniques," *International Journal of Advanced Computer Science and Applications*, vol. 3, no. 6, 2012. [Online]. Available: https://doi.org/10.14569/IJACSA.2012.030603

[52] M. A. Kosim, S. R. Aji, and M. Darwis, "Pengujian usability aplikasi pedulilindungi dengan metode system usability scale (sus)," *Jurnal Sistem Informasi dan Sains Teknologi*, vol. 4, no. 2, pp. 1–7, 2022. [Online]. Available: https://doi.org/10.31326/sistek.v4i2.1326

[53] Google, "Gemini models | google ai for developers," 2026, [Diakses pada: 7 September 2026]. [Online]. Available: https://ai.google.dev/gemini-api/docs/models/gemini

[54] A. Bangor, P. T. Kortum, and J. T. Miller, "An empirical evaluation of the system usability scale," *Intl. Journal of Human–Computer Interaction*, vol. 24, no. 6, pp. 574–594, 2008. [Online]. Available: https://doi.org/10.1080/10447310802205776